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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/744,888 | 01/31/2001 | Migaku Takahashi | OSP-10214 | 8691 |
| 466 | 7590 | 03/16/2010 | EXAMINER | |
| YOUNG & THOMPSON | | | FALASCO, LOUIS V | |
| 209 Madison Street | | | | |
| Suite 500 | | | ART UNIT | |
| Alexandria, VA 22314 | | | PAPER NUMBER | |
| | | | 1794 | |
| | | | NOTIFICATION DATE | |
| | | | DELIVERY MODE | |
| | | | 03/16/2010 | |
| | | | ELECTRONIC | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 09/744,888 | Applicant(s) TAKAHASHI, MIGAKU | |
| | Examiner LOUIS FALASCO | Art Unit 1794 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>01/31/2001</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Papers Received

1. This application is acknowledged a national stage of PCT/JP2005/014706.
2. The Information Disclosure Statement, *IDS*, received 02/21/2001 is acknowledged.
3. The amendments hand written into the claims received 02/21/2001 are acknowledged.

Claims

4. The claims are 1 to 22.

Examiner comment

5. The present copies of the claims include many marks rendering some claims confusing as to dependency. The examiner has assumed these were to remove multiple dependencies. It is recommended that applicants submit a clean copy of claims with this response.

Claim Rejections - 35 U.S.C. §102 and 35 U.S.C. §103

Statutory Basis

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-22 are rejected under 35 U.S.C. 102 (a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Takahashi et al** (WO 00/74042) – using US 6709775 as a translation.

The applied reference has a common inventor, *Migaku Takahashi*, with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal

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disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Takahashi et al (WO) teaches a substrate for a magnetic recording medium, comprising a non-magnetic base and a non-magnetic coating layer formed to coat said base, said non-magnetic coating layer containing a metal which is capable of co-precipitating with *Nickel* and has high affinity with *Oxygen* (**Takahashi et al** using US 6709775 as a translation - col. 3 Ins 32-40, col. 7 Ins 20-40, col. 12 Ins 24-32; col. 16 Ins 3-7 & 55-66; Example 10 to 17 col. 46 Ins 24 to col. 48 In 65 and col. 52 Ins 32-49). Alternative to anticipate this affinity would have been inherently obvious as *Nickel* is taught to the attraction the *Oxygen* provided in the reaction shown in the **Takahashi et al** (WO), noting when the composition is physically the same there is a reasonable expectation the properties to be the same. MPEP 2112.01.

As regards claims 2 to 5, 9 to 12, 17 to 19 and 21 elements in method steps 19 and 20 these are anticipated or would have at least been obvious as evident from **Takahashi et al** (WO) using US 6709775 as a translation at col. 3 Ins 33-43, col. 7 Ins 34-49, col. 13 Ins 9-24, col. 16 Ins 14-24, Example 4 col. 34 In 35-36, Example 17 col. 48 Ins 46-51; as further regards claims 5, 12 and 21 this is

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optimized by Co in limited exposure optimized to lower noise levels in a system -
col. 50 lns 44-51 and 61-67.

As regards claims 6, 13 to 18 and method portions of 19 and 20 method and
product of method steps the product and method steps are anticipated or would
have at least been obvious as evident from **Takahashi et al** (WO) using US
6709775 as a translation at col. 2 lns 23-26, col. 7 lns 42-53, col. 9 lns 40-44, col.
12 lns 11-22, col. 18 ln 61 to col. 19 ln 28, col. 26 ln 64 to col. 27 ln 4 intermittent
and optimal controlled pressure and vacuum environment col. 20 lns 11-32 and
col. 27 lns 6 to 59.

As regards claims 7, 8, 22 magnetic head these art taught and anticipated or
would have at least been obvious as evident from **Takahashi et al** (WO) using
US 6709775 as a translation at col. 4 lns 7-11, col. 13 lns 45-53, col. 23 lns 31-
39, col. 15 lns 41-49, col. 24 lns 54-61, col. 25 lns 2-13 and structural layers
protective layer col. 8 lns 35-38.

As regards claims 13 to 15 the crystalline structure and grains are taught and
anticipated or would have at least been obvious as evident from **Takahashi et al**
(WO) using US 6709775 as a translation noting island structure at Fig. 2 to Fig.
9, col. 6 lns 34-63, col. 8 lns 48-64, col. 9 lns 5-12, col. 10 lns 21-34, optimized in
size col. 11 lns 29-40 col. 13 ln 61 to col. 14 ln 59, col. 15 lns 38-49, col. 16 lns
61-67 with epitaxial growth col. 14 lns 11-26, col. 15 lns 9-12 & 65-68, col. 21 lns
26-31, and optimized size and ratio col. 17 lns 4-6.

Double Patenting

9. Claims are rejected under 35 U.S.C. §103(a) as being unpatentable over US . The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Double Patenting Rejections

10. Claims 1 to 22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3 to 5, 7 to 10 and 14 to 18 of U.S. Patent No. **6709775**.

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The claims of Patent **6709775**, contain details of seed layer that are more limited than the instant claims and represent a more narrow species than instantly claimed.

Although more narrow, they are not patentably distinct from each other. See *In re Goodman*, (CAFC) 29 USPQ2d 2010.

As regards claims 2 to 5, 9 to 12, 17 to 19 and 21 elements in method steps 19 and 20 with *nickel* this is defined for the method and magnetic recording medium claimed these are taught as a definition for method and magnetic recording medium claimed in **Takahashi et al** US 6709775 at col. 3 lns 33-43, col. 7 lns 34-49, col. 13 lns 9-24, col. 16 lns 14-24, Example 4 col. 34 lns 35-36, Example 17 col. 48 lns 46-51; as further regards claims 5, 12 and 21 this is optimized by Co in limited exposure optimized to lower noise levels in a system - col. 50 lns 44-51 and 61-67.

As regards claims 6, 13 to 18 and method portions of 19 and 20 method and product of method steps the definition for the method and magnetic recording medium claimed are in **Takahashi et al** US 6709775 including pressure and vacuum use at col. 2 lns 23-26, col. 7 lns 42-53, col. 9 lns 40-44, col. 12 lns 11-22, col. 18 lns 61 to col. 19 lns 28, col. 26 lns 64 to col. 27 lns 4, col. 20 lns 11-32 and col. 27 lns 6 to 59.

As regards claims 7, 8 and 22 note claim 16 of Patent **6709775** and definitions at col. 4 lns 7-11, col. 13 lns 45-53, col. 23 lns 31-39, col. 15 lns 41-49, col. 24

Ins 54-61, col. 25 Ins 2-13 Fig. 24 and 25 and structural layers protective layer in claim 18 of Patent **6709775** with definition at col. 8 Ins 35-38.

As regards claims 13 to 15 see definition for the method claimed in **Takahashi et al** US 6709775 for shown at Fig. 2 to Fig. 9, and defined as islands col. 6 Ins 34-63, col. 8 Ins 48-64, col. 9 Ins 5-12, col. 10 Ins 21-34, optimized in size col. 11 Ins 29-40 col. 13 In 61 to col. 14 In 59, col. 15 Ins 38-49, col. 16 Ins 61-67 with epitaxial growth col. 14 Ins 11-26, col. 15 Ins 9-12 & 65-68, col. 21 Ins 26-31, and optimized size and ratio col. 17 Ins 4-6

Other References

11. **Sugenoya et al** (US 5302469) is cited but not applied further teaching using a precipitation of surface layer with it's affinity to oxygen and crystalline grain structure.
12. **Chen et al** (US 5846648) and **Terakado et al** (US 6096445) are cited but have not been applied as cumulative teaching of seed layers and NiP alloy surface layer on a substrate.

Conclusion

13. The claims are 1 to 22.
 - No claim has been allowed.
 - the Information Disclosure Statement has been considered.

INQUIRES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis Falasco, whose telephone number is (571)272-1507. The examiner can normally be reached on M-F 10:30 - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached at (571)272-1291. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/L. F./
Examiner, Art Unit 1794

/Kevin M Bernatz/
Primary Examiner, Art Unit 1794

March 11, 2010